

Financial Management For Engineers

EMGT 6305

SPRING 2022

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HW 2

Section 2

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| **CDE Company** | | | | | |
| **Balance Sheet** | | | | | |
| **Current Assets** |  |  | **Current Liabilities** |  |  |
| Cash | 3500 |  | Accounts Payable | 600 |  |
| Accounts Receivable | 8000 |  | Income Tax Payable | 8800 |  |
| Prepaid Insurance | 4600 |  | **Total Current Liabilities** |  | **9400** |
| **Total Current Assets** |  | **16100** | **Total Liabilities** |  | **9400** |
| **Fixed Assets** |  |  | **Stockholder’s Equity** |  |  |
| Equipment | 85000 |  | Common Stock | 35000 |  |
| Less Accumulated Depreciation | 12000 |  | Retained Earnings | 44700 |  |
| **Total Fixed Assets** |  | **73000** | **Total Stockholder’s Equity** |  | **79700** |
| **Total Assets** |  | **89100** | **Total Liabilities and Equity** |  | **89100** |
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| **Current Ratio = Current Assets / Current Liabilities = 16100 / 9400 = 1.71 times** | | | | | |
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| **Working Capital = Current Assets – Current Liabilities = 16100 - 9400 = $ 6700** | | | | | |
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| **Assets Turnover =Sales / Total Assets = 109400 / 89100 = 1.23 times** | | | | | |
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| **Fixed Assets Turnover = Sales / Fixed Assets = 109400 / 73000 = 1.50 times** | | | | | |
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| **A/R Turnover = Sales / A/R = 109400 / 8000 = 13.68 times** | | | | | |
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| **Debit Ratio = Total Liabilities / Total Assets = 9400 / 89100 = 10.55%** | | | | | |

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| **XYZ Company** | | | | | |
| **Balance Sheet** | | | | | |
| **Current Assets** |  |  | **Current Liabilities** |  |  |
| Cash | 9800 |  | Accounts Payable | 1200 |  |
| Accounts Receivable | 8250 |  | Unearned Service Fee | 6700 |  |
| Supplies | 2300 |  | **Total Current Liabilities** |  | **7900** |
| Prepaid Advertising | 3800 |  | **Total Liabilities** |  | **7900** |
| **Total Current Assets** |  | **24150** | **Stockholder’s Equity** |  |  |
| **Fixed Assets** |  |  | Common Stock | 20000 |  |
| Trucks | 32300 |  | Retained Earnings | 21250 |  |
| Less Acummulated Depreciation - Trucks | 12800 |  | **Total Stockholder’s Equity** |  | **41250** |
| Equipment | 7600 |  |  |  |  |
| Less Acummulated Depreciation - Equipment | 2100 |  |  |  |  |
| **Total Fixed Assets** |  | **25000** |  |  |  |
| **Total Assets** |  | **49150** | **Total Liabilities and Equity** |  | **49150** |
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| **Current Ratio = Current Assets / Current Liabilities = 24150 / 7900 = 3.06 times** | | | | | |
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| **Working Capital = Current Assets – Current Liabilities = 24150 – 7900 = $ 16250** | | | | | |
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| **Assets Turnover =Sales / Total Assets = 83000 / 49150 = 1.69 times** | | | | | |
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| **Fixed Assets Turnover = Sales / Fixed Assets = 83000 / 25000 = 3.3 times** | | | | | |
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| **A/R Turnover = Sales / A/R = 83000 / 8250 = 10.06 times** | | | | | |
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| **Debit Ratio = Total Liabilities / Total Assets = 7900 / 49150 = 16.07%** | | | | | |

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| **Problem 4** | | |
| **Income Statement** | | |
| Service Fees Earned |  | 70400 |
| **Total Income** |  | **70400** |
| Rent Expense | 13000 |  |
| Salaries Expense | 33400 |  |
| Supplies Expense | 4700 |  |
| Insurance Expense | 3250 |  |
| Depreciation Expense – Equipment | 720 |  |
| Interest Expense | 630 |  |
| **Total Operating Expense** | **55700** |  |
| **Net Income** |  | **14700** |
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| **Statement of Retained Earnings** | | |
| **Beginning Retained Earnings** |  | **7505** |
| Net Income |  | 14700 |
| Dividends | 2900 |  |
| **Net Increase in Retained Earnings** |  | **11800** |
| **Ending Retained Earnings** |  | **19305** |
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| **Profit Margin = (Net Income / Revenue) × 100** | | |
| **Profit Margin = (14700 / 70400) × 100 = 20.88%** | | |
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| **Payout Ratio = (Dividends / Net Income) × 100** | | |
| **Payout Ratio = (2900 / 14700) × 100 = 19.73 %** | | |

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| **Problem 4** | | | | | |
| **Balance Sheet** | | | | | |
| **Current Assets** |  |  | **Current Liabilities** |  |  |
| Cash | 5000 |  | Accounts Payable | 845 |  |
| Accounts Receivable | 5270 |  | **Total Current Liabilities** |  | **845** |
| Supplies | 5060 |  | Long-Term Notes Payable | 9000 |  |
| Prepaid Insurance | 1500 |  | **Total Long-Term Liabilities** |  | **9000** |
| **Total Current Assets** |  | **16830** | **Total Liabilities** |  | **9845** |
| **Fixed Assets** |  |  | **Stockholder’s Equity** |  |  |
| Equipment | 18400 |  | Common Stock | 5000 |  |
| Less Acummulated Depreciation - Equipment | 1080 |  | Retained Earnings | 19305 |  |
| **Total Fixed Assets** |  | **17320** | **Total Stockholder’s Equity** |  | **24305** |
| **Total Assets** |  | **34150** | **Total Liabilities and Equity** |  | **34150** |
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| **Current Ratio = Current Assets / Current Liabilities = 16830 / 845 = 19.92 times** | | | | | |
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| **Working Capital = Current Assets – Current Liabilities = 16830 – 845 = $ 15985** | | | | | |
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| **Assets Turnover =Sales / Total Assets = 70400 / 34150 = 2.06 times** | | | | | |
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| **Fixed Assets Turnover = Sales / Fixed Assets = 70400 / 17320 = 4.06 times** | | | | | |
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| **A/R Turnover = Sales / A/R = 70400 / 5270 = 13.56 times** | | | | | |
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| **Debit Ratio = Total Liabilities / Total Assets = 9845 / 34150 = 28.83%** | | | | | |